

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/010,742

DATE: 12/19/2001

TIME: 10:34:41

Input Set : A:\491c7.app.txt

Output Set: N:\CRF3\12192001\J010742.raw

OIPE

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APR 11 2002

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4 <110> APPLICANT: Dillon, Davin C.
5 Day, Craig H.
6 Jiang, Yuqiu
7 Houghton, Raymond L.
8 Mitcham, Jennifer L.
9 Wang, Tongtong
10 McNeill, Patricia D.
11 Harlocker, Susan L.
12 Bennington, Angela Ann
13 Zehentner, Barbara
14 Fanger, Gary R.
15 Retter, Marc W.
20 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
21 DIAGNOSIS OF BREAST CANCER
24 <130> FILE REFERENCE: 210121.491C7
C--> 26 <140> CURRENT APPLICATION NUMBER: US/10/010,742
27 <141> CURRENT FILING DATE: 2001-11-30
29 <160> NUMBER OF SEQ ID NOS: 307
31 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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34 <211> LENGTH: 298
35 <212> TYPE: DNA
36 <213> ORGANISM: Homo sapiens
38 <400> SEQUENCE: 1
39 ctgaacagtgcacgtccgtgctggagacagtcctgctgacacctgaatgctgaacatg 60
40 ctctgtggggctatcttttctttctctgtagtctcttggtgatctcatctgcttttct 120
41 gctcgagtgaagacagcctgaaccttgctcttcttgctcagaggggaaaaaggaatt 180
42 ggatttctcagggtctgggacctgggctgtggcttgagggtccgagactgatgaatcca 240
43 agcatgcttgaggcctgggtccggggctcatgcgaagagaa ggttcccata ccaaacac 298
45 <210> SEQ ID NO: 2
46 <211> LENGTH: 276
47 <212> TYPE: DNA
48 <213> ORGANISM: Homo sapiens
50 <400> SEQUENCE: 2
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52 tgtattttcaagcttctgaaattaggcaaaatattcatcgcaaagtctctagcgtcatat 120
53 ttttctcaccataattacgtttccacgagattatttatatatagttggcttatctctgca 180
54 gtccttgaaggtgaagttgtgtgttactagctgtgttttgggatgtcagcagtggcctg 240
55 aagtgaagttgtgcaataaatgttaagttgaacctc 276
57 <210> SEQ ID NO: 3
58 <211> LENGTH: 405
59 <212> TYPE: DNA
60 <213> ORGANISM: Homo sapiens
62 <220> FEATURE:
63 <221> NAME/KEY: misc_feature
64 <222> LOCATION: 141
65 <223> OTHER INFORMATION: n = A,T,C or G

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67 <400> SEQUENCE: 3

68 tcacatggct atttcattta ttttagtagtt ttgaaatggt agcaaataata aggtattttgt 60
 69 aaagcatctt tcattataaa gagatttagta atattcacca atcatgccaa tgagattata 120
 70 cactctgccca aagactacta naaaaaatttg atcattatta aattcaatgt tatttgacag 180
 71 tgtgaactct atgtaacagc acaaattctg gactttgaat ctggctgctg tctcacctg 240
 72 aaccattaaa atgaccttgt taacaaggaa ggaatcaatg gggaaatata acaaccagag 300
 73 attggctgtg tgtccaaggg tgccttgtct tgttgccagg atcagactgt gaaatcacag 360
 74 aggcaagctg atgtcatcag aggtgactct gcccccaaca caatg 405

76 <210> SEQ ID NO: 4

77 <211> LENGTH: 696

78 <212> TYPE: DNA

79 <213> ORGANISM: Homo sapiens

81 <400> SEQUENCE: 4

82 catttgtgtg ggcactgtta cagtgaacg gaaacgtgga aaatcacagc caaactgtgc 60
 83 tctgaaagaa cactctatgt ctaatatagc cagcgtcaag agtccttatg aggcggagaa 120
 84 ctccggggaa gagctggatc agaggatttc caaggccaag ccaatgtgta acacatgtgg 180
 85 gaaagtgttt tcagaagcca gcagtttgag aaggcacatg agaatacata aaggagtcaa 240
 86 accttacgtc tgccacttat gtggaaaggc atttacccaa tgtaaccagc tgaaaacgca 300
 87 tgtaagaact catacaggtg agaagccata caaatgtgaa ttgtgtgata aaggatttgc 360
 88 tcagaaatgt cagctagtct tccatagtcg catgcatcat ggtgaagaaa aacctataa 420
 89 atgtgatgta tgcaacttac agtttgcaac ttctagcaat ctcaagattc atgcaaggaa 480
 90 gcatagtggg gagaagccat atgtctgtga taggtgtgga cagagatttg ctcaagccag 540
 91 cacactgacc tatcatgtcc gtaggcatac tggagaaaag ccttatgtat gtgataacctg 600
 92 tgggaaggca tttgtgtct ctagttctct tatcactcat tctcgaaaac atacaggtaa 660
 93 gtttgacagg gagagactgc ttaaaataaa gttata 696

95 <210> SEQ ID NO: 5

96 <211> LENGTH: 580

97 <212> TYPE: DNA

98 <213> ORGANISM: Homo sapiens

100 <220> FEATURE:

101 <221> NAME/KEY: misc_feature

102 <222> LOCATION: 332

103 <223> OTHER INFORMATION: n = A,T,C or G

105 <400> SEQUENCE: 5

106 acatcaaaaa ggaaatattt ttgacttgct tttcttctgt aaatcctccc atctcactaa 60
 107 tatttacaac aatccagagt agcgtttatg agacactgaa aaagacaggg aggaaatcct 120
 108 ttttcaagat atgaagtcag aacctgaatg tagacatcgg acagagaagt cctcaaccac 180
 109 aaacctgtcc tccagctcta gagagagtaa ggctgtatct ccaaccttga gatctttcat 240
 110 tacattttcc cctttttggg tgttaaattc ttccaagaa tgctgtactt gtaaaaatga 300
 111 ttttattcta gctacaaaac atttcattta anaaaaccgc attttatatc cttgtgtgaa 360
 112 atgctcccaa aagccatcaa gatatggaga caacagattt taaaaacata aatctaata 420
 113 tatgggcttg aaacagtatg aacatttaac agagtgcacac gatatcatta ttatatttgt 480
 114 ttgtcatgag atgaaaggcc tggaggcaga tgggtgattaa tcataattcc tgagcttcta 540
 115 cagaaatttt aaaatgaaat tactaactgc ttaaaattat 580

117 <210> SEQ ID NO: 6

118 <211> LENGTH: 557

119 <212> TYPE: DNA

120 <213> ORGANISM: Homo sapiens

122 <400> SEQUENCE: 6

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123 attacattca agataaaaga tttattcaca ccacaaaaag ataatcacaa caaaatatac 60
124 actaacttaa aaaacaaaag attatagtga cataaaatgt tatattctct ttttaagtgg 120
125 gtaaaagtat tttgtttgct tctacataaa tttctattca tgagagaata acaaataatta 180
126 aaatacagtg atagtttgca tttcttctat agaatgaaca tagacataac cctgaagctt 240
127 ttagttttaca gggagtttcc atgaagccac aaactaaact aattatcaaa cacattagtt 300
128 atttccagac tcaaatagat acacattcaa ccaataaact gagaaagaag catttcatgt 360
129 tctctttcat tttgctataa agcatttttt cttttgacta aatgcaaagt gagaaattgt 420
130 attttttctc cttttaattg acctcagaag atgcactatc taattcatga gaaatacgaa 480
131 atttcaggtg tttatcttct tccttacttt tggggtctac aaccagcata tcttcatggc 540
132 tgtgaaattc atggctg 557
134 <210> SEQ ID NO: 7
135 <211> LENGTH: 653
136 <212> TYPE: DNA
137 <213> ORGANISM: Homo sapiens
139 <400> SEQUENCE: 7
140 cattgtgttg ggggaagtag ggaatattat tgaggcaggg taagaaatgg tttacaattc 60
141 tgaaaggatg atcaaagaaa aactcattgt tgagaaagta atatgagtag agacctgaaa 120
142 taagtgaggg agtgacgggt tatgtccagg gcaataatgt ttctgacaga ggggagagtc 180
143 atttcagaag cctagaggca tgtgtaaagc tgttagaatg ccagacagtc accaggccaa 240
144 gatgtgcaga tatccataag tgaaggggaa agaaatacaa aatgaaggca gagaaatcac 300
145 aaaattggat aagtgggtgc ttgtaggcca tagtgatttt agttcatact aaaattgagt 360
146 taggctgccca ttgtagggtt tgtgagctca gggataacat ggtctgaatt ttatttctaa 420
147 aaggatcact ccaagtgtta cattgcaaag aataacgtaa ggtggctggg ttagtagact 480
148 aaagtggaat atagtaacag tgaaatacat tttgtggtaa agcttggtag atttgaccac 540
149 acaaaattgt gaaattacct gtggcacaaa aaatatcaaa ggtacataca gacagaagaa 600
150 ccttgcgatt gtttattaat gtccttaatt tataatgtta ataccagtag aag 653
152 <210> SEQ ID NO: 8
153 <211> LENGTH: 456
154 <212> TYPE: DNA
155 <213> ORGANISM: Homo sapiens
157 <400> SEQUENCE: 8
158 cattgtgttg ggctaactct tggctctctat ccacctgcc tagcaattta totcaaagct 60
159 tcaagttcct gccatctaca tgtgccagg tcaaccaatc aatggctcag acagataagc 120
160 caacatgcat ccgcccggag ctgccgaaaa tgctgaagga gtttgccaaa gccgccattc 180
161 gggcgcagcc gcaggacctc atccagtggg gggccgatta ttttgaggcc ctgtcccgtg 240
162 gagagacgcc tccggtgaga gagcggctct agcagatcgc tttgtgtaac tgggcagagc 300
163 taacacctga gctgttaaag atcctgcatt ctcaaggttgc tggcagactg atcatccgtg 360
164 cagaggagct ggcccagatg tggaaagtgg tgaatctccc aacagatctg tttaatagtg 420
165 tgatgaatgt gggtcgcttc acggaggaga tcgagt 456
167 <210> SEQ ID NO: 9
168 <211> LENGTH: 512
169 <212> TYPE: DNA
170 <213> ORGANISM: Homo sapiens
172 <400> SEQUENCE: 9
173 gtttttgatt cattttatatt taacaatggt taacaatgta agtccacata taagataccc 60
174 aagcttttaa tatctataca tataaactga tttcaacatc tttggcttca aaacagtaaa 120
175 attgtttttc caatatcaaa caagtcaaatt ttggaaaagg cataaatctg tatgaacatc 180
176 ctgtatccat ggagatgtca tgactaaatt cagaaatagc ctcatctctc tttgtttttg 240
177 ctttcttatg tctgagttct gcatccaatt ctgtttatta catagttttc tataagattg 300

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178 tacccttttt aaacagtgtc tattgatata tattctaggt gtctggaagt ctttttctat 360
 179 agtcggctct tggttgtctc tgggaatatg aatggaagga gcagagtga aataaatctg 420
 180 agggcaatat tcataataa tccaagagct acactgtagt caactctccc cagagcctga 480
 181 ccacagtgtt tccctctctc ctctctccaa cc 512

183 <210> SEQ ID NO: 10

184 <211> LENGTH: 308

185 <212> TYPE: DNA

186 <213> ORGANISM: Homo sapiens

188 <220> FEATURE:

189 <221> NAME/KEY: misc_feature

190 <222> LOCATION: 214, 276

191 <223> OTHER INFORMATION: n = A,T,C or G

193 <400> SEQUENCE: 10

194 atgtttatga agacctttaa atatttatat agaaacaaaa tgtcattgca acctaacatc 60
 195 atccattaaa aataaaagga aaggaaaacg gcagggaaaa gtgcagtaat aacaaatggt 120
 196 gacatgcttg gtcttaagca tcatagcaaa ctcatattt ccaatgaaac aaggattttt 180
 197 agacccatct ttggaaatga tccccaaatt aganaacat cagggtctca aaaaggaagg 240
 198 gtcatcaaag tccatccagc ccagccaccc tgaggngcct gtatctcttc aacaagccca 300
 199 acacaatg 308

201 <210> SEQ ID NO: 11

202 <211> LENGTH: 510

203 <212> TYPE: DNA

204 <213> ORGANISM: Homo sapiens

206 <220> FEATURE:

207 <221> NAME/KEY: misc_feature

208 <222> LOCATION: 98, 327

209 <223> OTHER INFORMATION: n = A,T,C or G

211 <400> SEQUENCE: 11

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 214 tgctatataa tgccagtcct atgccatata ataagaactg caacattagc tgtcacttcc 180
 215 tccattgctc ttctggaccc taagggatga gggaggggac tcagacacaa aacacaaccc 240
 216 aaataaactg tgcagtgatt cctaatagtt ataaacccaa tctaagttgt ccaaacagct 300
 W--> 217 gaagaataac tgcaggtatt gttccanagc tgatacgagg ttttgctttt acagcctggt 360
 218 aaaagttctg cactaggtga gaagtcacag ittaaggatg catgttctgt aaatagttac 420
 219 tacatatata catttactgt ctgtaaacac tagaaatata cattagacag agtaccctca 480
 220 caagttgggt acagttttaa aaagaagatg 510

222 <210> SEQ ID NO: 12

223 <211> LENGTH: 611

224 <212> TYPE: DNA

225 <213> ORGANISM: Homo sapiens

227 <220> FEATURE:

228 <221> NAME/KEY: misc_feature

229 <222> LOCATION: 196

230 <223> OTHER INFORMATION: n = A,T,C or G

232 <400> SEQUENCE: 12

233 agttttataa aatattttat ttacagtaga gctttacaaa aatagtctta aattaatata 60
 234 aatccctttt gcaatataac ttatatgact atcttctcaa aaacgtgaca ttcgattata 120
 235 acacataaac tacatttata gttgttaagt cacctttagt tataaatatg ttttcatctt 180

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W--> 236 ttttttgtaa taaggⁿacat accaataaca atgaacaatg gacaacaaat cttattttgt 240
 237 tattctttcca atgtaaaatt catctctggc caaaacaaaa ttaaccaaag aaaagtaaaa 300
 238 caattgtccc tctgttcaac aatacagtc tttttaatta tttgagagtt tatctgacag 360
 239 agacacagca ttaaaactgaa agcaccatgg cataaagtct agtaacatta tcctcaaaaag 420
 240 cttttttccaa tgtctttcct tcaactgttt attcagttatt tggccagtac aaataaagat 480
 241 tgggtctcaac tctctctttc attagttctca agtgttccta ttatgcactg agttttcaga 540
 242 ccttcccaac tggcatgtgt tttaagtgtg agttttctttc tttggttcca agtggagttt 600
 243 cacaacattt a 611
 245 <210> SEQ ID NO: 13
 246 <211> LENGTH: 394
 247 <212> TYPE: DNA
 248 <213> ORGANISM: Homo sapiens
 250 <220> FEATURE:
 251 <221> NAME/KEY: misc_feature
 252 <222> LOCATION: 62, 91, 105, 195, 294
 253 <223> OTHER INFORMATION: n = A,T,C or G
 255 <400> SEQUENCE: 13
 256 caatgttttag attcattttta ttagtggcat atacaaagca ccatataata tatgaaacgt 60
 W--> 257 anaacaatca tgactatgta attaactgta naaataactg ctaanaaaat atagcaatat 120
 W--> 258 ttaacacagg atttctaaaa ccatttatatt ttcattactt ttcccaaagc taatgtccca 180
 W--> 259 tgttttatatt tatanacttt gtttatcaag atttatatgc atttggcacc tttttggggt 240
 W--> 260 gaaaatagtt gatgtactct gtacagtaat gttacagttt tatacaaaat tcaanaaatat 300
 261 tgcatttggg atagttcttta tggctctctt ccaagtattc agtttcacac aacagcaaac 360
 262 actctgaatg cctttcctcc tgcccaacac aatg 394
 264 <210> SEQ ID NO: 14
 265 <211> LENGTH: 361
 266 <212> TYPE: DNA
 267 <213> ORGANISM: Homo sapiens
 269 <220> FEATURE:
 270 <221> NAME/KEY: misc_feature
 271 <222> LOCATION: 7, 249, 258
 272 <223> OTHER INFORMATION: n = A,T,C or G
 274 <400> SEQUENCE: 14
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 276 agagaggcca atgtatatata ataagagttt atacagaaac tgccaattca caaaacagca 120
 277 ctgcatgggt tctatatattg aagcacaaga catggtcaca tggttccact gtacaggtag 180
 278 aaacaagccc acagacaata catagagtac cacctgaaac gaggcccttg gagctgctca 240
 W--> 279 gcttcttana aaataganaa ctttcaattg tcataatata ttttgattca aaatgtcttc 300
 280 taaaatgttt tcattgtggg agaaaattaa gaaggggcaa aaatccatct atggaacttc 360
 281 t 361
 283 <210> SEQ ID NO: 15
 284 <211> LENGTH: 537
 285 <212> TYPE: DNA
 286 <213> ORGANISM: Homo sapiens
 288 <220> FEATURE:
 289 <221> NAME/KEY: misc_feature
 290 <222> LOCATION: 460
 291 <223> OTHER INFORMATION: n = A,T,C or G
 293 <400> SEQUENCE: 15

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

VERIFICATION SUMMARY

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L:26 M:270 C: Current Application Number differs, Wrong Format

L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3

L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5

L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10

L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10

L:213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11

L:217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11

L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12

L:257 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13

L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13

L:260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13

L:275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14

L:279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14

L:301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15

L:315 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27

L:511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29

L:552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31

L:596 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33

L:600 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33

L:601 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33

L:605 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33

L:880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42

L:906 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43

L:930 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44

L:931 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44

L:950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45

L:963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46

L:969 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46

L:983 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47

L:1040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50

L:1041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50

L:1088 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53

L:1090 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53

L:1132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56

L:1133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56

L:1134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56

L:1147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57

L:1154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57

L:1167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:1173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58

L:1188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59

L:1189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59

L:1190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59

L:1191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59

L:1204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60

L:1223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61

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L:1224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61

L:1225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61

L:1227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61